CLAIMS

1. A polypeptide ~~consisting of~~ or comprising at least one amino acid sequence of at most 20 consecutive amino-acids defined in SEQ ID NO: 1, said polypeptide binding at least one MHC-I glycoprotein, with the proviso that said polypeptide is different from SEQ ID NO: 2.

2. The polypeptide of claim 1, wherein the amino acid sequence is selected from the group consisting of the amino acid sequences shown in SEQ ID NO: 3 to SEQ ID NO: 33, SEQ ID NO: 65 and SEQ ID NO: 66.

3. The polypeptide of claim 1 ~~or 2~~, wherein the amino acid sequence is selected from the group consisting of:
   (a) SEQ ID NO: 3 to SEQ ID NO: 6 and SEQ ID NO: 65 and SEQ ID NO: 66, and said polypeptide binds the HLA A2 glycoproteins of MHC-I;
   (b) SEQ ID NO: 7 to SEQ ID NO: 15, and said polypeptide binds the HLA B7 glycoproteins of MHC-I;
   (c) SEQ ID NO: 16 to SEQ ID NO: 19, and said polypeptide binds the HLA A3 glycoprotein of MHC-I;
   (d) SEQ ID NO: 19 to SEQ ID NO: 21, and said polypeptide binds the HLA A11 glycoproteins of MHC-I;
   (e) SEQ ID NO: 22 to SEQ ID NO: 25, and said polypeptide binds the HLA A24 glycoproteins of MHC-I;
   (f) SEQ ID NO: 26 to SEQ ID NO: 29, and said polypeptide binds the HLA A1 glycoproteins of MHC-I; and
   (g) SEQ ID NO: 30 to SEQ ID NO: 33, and said polypeptide binds the HLA B8 glycoproteins of MHC-I.

4. An analogue of the polypeptide of ~~any one of claims 1 to 3~~ claim 1, which is capable of inhibiting the binding of the polypeptide or of an epitope contained in said polypeptide to a T cell receptor either by directly binding to the same T cell receptor or by binding to the same T cell receptor after being processed.

5. A polynucleotide encoding the polypeptide of ~~any one of claims 1 to 3.~~ claim 1

6. The polynucleotide of claim 5, comprising a nucleotide sequence selected from the group consisting of SEQ ID NO: 34 to SEQ ID NO: 64, and their complementary sequences.

7. A polynucleotide encoding the analogue of claim 4.

8. The polynucleotide of ~~any one of claims 5 to 7~~ claim 5, further containing elements allowing the expression of the polypeptide or analogue in a host cell.

9. The polynucleotide of claim 8, wherein said element for expression in a host cell is a promoter.

10. The polynucleotide of ~~any one of claims 5 to 9~~ claim 5, wherein said polynucleotide is associated with one or more compounds selected from the group consisting of transfecting agents, stabilizing agents and targeting agents.

11. A vector comprising at least one polynucleotide of ~~any one of claims 5 to 10~~ claim 5.

12. The vector of claim 11 comprising at least two different nucleotide sequences encoding at least two polypeptides ~~as defined in claim 3~~.

13. The vector of claim 11 ~~or 12~~ which is a plasmid.

14. The vector of claim 11 ~~or 12~~, which is a viral vector.

15. A host cell comprising a polynucleotide of ~~any one of claims 5 to 10 or a vector of any one of claims 11 to 14~~ claim 5.

16. The host cell of claim 15, which is a prokaryotic cell, a yeast cell, or an animal cell, ~~such as a mammalian cell.~~

17. A composition comprising a polypeptide of any one of claims 1 to 3, an analogue of claim 4, a polynucleotide of any one of claims 5 to 10, a vector of any one of claims 11 to 14, or a host cell of claim 15 or 16 or a combination of two or more of these different compounds.

18. The composition of claim 17, further comprising a pharmaceutical carrier.

19. Use of a polypeptide of any one of claims 1 to 3, of an analogue of claim 4, of a polynucleotide of any one of claims 5 to 10, of a vector of any one of claims 11 to 14, of a host cell of claim 15 or 16 or of a composition of claim 17 for the preparation of a medicament for effecting a CTL response in a subject.

20. A diagnostic composition comprising a polypeptide of ~~any one of claims 1 to~~ claim 1 to 3.

21. A vaccine comprising a polypeptide of any one of claims 1 to 3, an analogue of claim 4, a polynucleotide of any one of claims 5 to 10, a vector of any one of claims 11 to 14 or a host cell of claim 15 or 16, which vaccine is capable of stimulating a MHC class I restricted T cell response directed to an epitope as contained in a polypeptide of any one of claims 1 to 3.

22. The vaccine of claim 21 which comprises an adjuvant or a delivery system, which adjuvant or delivery system stimulates a MHC class I restricted response.

23. A T cell receptor which recognizes an epitope contained in a polypeptide ~~of any one of claims 1 to~~ claim 1 to 3 or a fragment of said T cell receptor which can recognize the epitope.

24. A T cell comprising the T cell receptor of claim 23.

25. The T cell of claim 24, which has been produced by replication *in vitro*.

26. A product that selectively binds a T cell receptor of claim 23.

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27. The product of claim 26 which product comprises (a) an HLA molecule, or a fragment thereof, comprising a polypeptide of any one of claims 1 to 3 or an analogue of claim 4 in its peptide binding groove, or (b) an analogue of (a) which is capable of inhibiting the binding of (a) to a T cell receptor of claim 23.

28. A method of identifying a product of claim 26 ~~or 27~~ comprising contacting a candidate substance with a T cell receptor or fragment of claim ~~23~~ and determining whether the candidate substance binds to the T cell receptor or fragment, the binding of the candidate substance to the T cell receptor or fragment indicating that the candidate substance is such a product.

29. A cell comprising a product of claim 26 ~~or 27.~~

30. A method of identifying a MHC class I restricted T cell response, said method comprising contacting a population of cells comprising MHC class I restricted T cells with:

the polypeptide of any one of claims 1 to 3 or with the analogue of claim 4 under conditions suitable for the presentation of the polypeptide or analogue to the T cells, or

a product of claim 26 or 27 or cells of claim 29; and

determining whether the CD8 T cells recognize the polypeptide, analogue, the product or the cell, recognition by the T cells indicating the presence of a MHC class I restricted T cell response.

31. The method of claim 30, in which the determination of the T cell recognition is done by detecting the expression of a substance by the T cells, the expression of the substance indicating that the T cells have recognized the polypeptide, the analogue, the product or the cell.

32. The method of claim 31, in which the substance which is detected is IFN-γ.

33. A method of diagnosing cancer in a host said method comprising determining the presence or absence in the host of a MHC class I restricted T cell response to a

polypeptide of any one of claims 1 to 3, the presence of the MHC class I restricted T cell response indicating that the host has cancer.

34. The method of claim 33, in which the presence or absence of the MHC class I restricted T cell response is determined by the method of any one of claims 30 to 32.

35. A method of causing the replication of MHC class I restricted T cells which recognize an epitope of a cancer cell or an activated T cell, said method comprising contacting a population of cells which comprises MHC class I restricted T cells with the polypeptide of any one of claims 1 to 3 or with the analogue of claim 4 under conditions in which the polypeptide or the analogue are presented to T cells in the population, or with a product of claim 26 or 27 or with a cell of claim 29.

36. A pharmaceutical composition comprising a product of claim 26 or 27, a cell of claim 28, the T cell of claim 24 or 25, or a cell which has been replicated in the method of claim 35.

37. A kit for carrying out a method of any one of claims 30 to 35 comprising a polypeptide of any one of claims 1 to 3, an analogue of claim 4, a polynucleotide of any one of claims 5 to 10, a composition of claim 17 and/or a product of claim 26 or 27.